## ABSTRACT OF THE DISCLOSURE

Lidocaine analogs, latex particle-analog conjugates, and methods of making and using the same. The analogs have the formula:

$$R^{7}$$
 $R^{6}$ 
 $R^{4}$ 
 $R^{3}$ 
 $R^{7}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{2}$ 

Formula 1

## wherein

Z comprises a nucleophilic group and optionally a protecting group;

L is a linker;

 $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$  are each independently H, a protecting group, or  $C_1$  to  $C_6$  alkyls, provided that  $R^1$  and  $R^3$  may form a six membered ring with the nitrogen and carbon atom to which  $R^1$  and  $R^3$  are attached;

 $R^6$  and  $R^7$  are each independently H or  $C_1$  to  $C_{20}$  alkyls; and including salts thereof.

The analogs are immobilized on latex particles and prepared for use in assays for lidocaine.